WHAT IS CLAIMED IS:

1. An exhaust gas purifying system comprising:

a flow-through monolithic catalyst disposed in an exhaust gas passageway through which exhaust gas flows, said monolithic catalyst functioning to adsorb and oxidize a soluble organic fraction in exhaust gas, to adsorb nitrogen oxides in exhaust gas in a condition in which a temperature of exhaust gas is not higher than 200 °C and to allow carbon particle in exhaust gas to pass through the monolithic catalyst; and

a filter catalyst disposed in the exhaust gas passageway downstream of said flow-through monolithic catalyst, said filter catalyst functioning to trap the carbon particle and to oxidize hydrocarbons, carbon monoxide and nitrogen monoxide in exhaust gas.

2. An exhaust gas purifying system as claimed in Claim 1, wherein said flow-through monolithic catalyst is of a honeycomb form and includes a coat layer, said coat layer including refractory inorganic oxide having a specific surface area of not larger than 250 m^2/g and an average pore size ranging from 1 to 10 nm, and platinum carried on the refractory inorganic oxide.

3. An exhaust gas purifying system as claimed in Claim 2, wherein said coat layer includes at least one selected from the group consisting of cerium, lanthanum, zirconium, iron, magnesium and potassium.

4. An exhaust gas purifying system as claimed in Claim 1, wherein said flow-through monolithic catalyst includes a SOF adsorbing and oxidizing section for adsorbing and oxidizing the soluble organic fraction in exhaust gas, and a NOx adsorbing section for adsorbing nitrogen oxides in the condition in which a temperature of exhaust gas is not higher than 200 °C, said SOF

adsorbing and oxidizing section being located upstream of the NOx adsorbing section relative to flow of exhaust gas.

5. An exhaust gas purifying system as claimed in Claim 4, further comprising a device for controlling a ratio of [hydrogen / all reducing components] at a value of not smaller than 0.5 at a location upstream of the NOx adsorbing section in a condition in which an air/fuel ratio of exhaust gas is smaller than 14.

6. An exhaust gas purifying system as claimed in Claim 5, wherein said ratio controlling device includes a hydrogen supplying catalyst for supplying hydrogen in exhaust gas, said hydrogen supplying catalyst being disposed upstream of the NOx adsorbing section and containing at least one noble metal selected from the group consisting platinum, palladium and rhodium, and cerium.

7. An exhaust gas purifying system as claimed in Claim 6, wherein the cerium carries the at least one noble metal in an amount of not less than 60 % by weight of whole the at least one noble metal contained in the hydrogen supplying catalyst.

8. An exhaust gas purifying system as claimed in Claim 6, wherein the SOF adsorbing and oxidizing section of said flow-through monolithic catalyst contains a SOF adsorbing and oxidizing catalyst component for adsorbing and oxidizing the soluble organic fraction, wherein the at least one noble metal and cerium of said hydrogen supplying catalyst and the SOF adsorbing and oxidizing catalyst components are carried on a single monolithic honeycomb substrate.

9. An exhaust gas purifying system as claimed in Claim 2, wherein the refractory inorganic oxide contains an oxide of at least

one metal selected from the group consisting of silicon, aluminum, titan and zirconium.

10. An exhaust gas purifying system as claimed in Claim 2, wherein said refractory inorganic oxide is at least one selected from the group consisting of a layered clay mineral having a swelling property, and zeolite.

11. An exhaust gas purifying system as claimed in Claim 10, wherein the layered clay mineral has a swelling property is smectite clay mineral.

12. An exhaust gas purifying system as claimed in Claim 10, wherein said zeolite is at least one selected from the group consisting of MFI, zeolite β, mordenite, USY zeolite and ferrielite.

13. An exhaust gas purifying system as claimed in Claim 2, wherein the refractory inorganic oxide has an average pore size ranging from 1 to 4 nm.

14. An exhaust gas purifying system as claimed in Claim 1, wherein said filter catalyst includes a filter, and a catalyst component carried on the filter, the catalyst component including platinum.

15. An exhaust gas purifying system as claimed in Claim 1, wherein said filter catalyst includes a fibrous inorganic compound which carries platinum.

16. An exhaust gas purifying system as claimed in Claim 14, wherein the catalyst component includes at least one selected from the group consisting of cerium, lanthanum, zirconium, iron, magnesium and potassium.

17. An exhaust gas purifying system as claimed in Claim 14, wherein the catalyst component includes an oxide of at least one selected from the group consisting of silicon, aluminum, titan and zirconium.

18. An exhaust gas purifying system as claimed in Claim 17, wherein the oxide has an average particle size of not larger than 0.05 μm, wherein the oxide carries platinum.

19. An exhaust gas purifying system as claimed in Claim 1, further comprising a HC adsorbing catalyst for adsorbing hydrocarbons in exhaust gas, disposed downstream of said flow-through monolithic catalyst relative to flow of exhaust gas.

20. An exhaust gas purifying system as claimed in Claim 19, said HC adsorbing catalyst is disposed upstream of said filter catalyst relative to flow of exhaust gas.

21. An exhaust gas purifying system as claimed in Claim 19, wherein said HC adsorbing catalyst includes a HC adsorbing catalyst component for adsorbing hydrocarbons, wherein said HC adsorbing catalyst component is carried in said filter catalyst.

22. An exhaust gas purifying system as claimed in Claim 1, wherein said filter catalyst includes a plurality of filter catalysts which are arranged in series relative to flow of exhaust gas.

23. An exhaust gas purifying system as claimed in Claim 22, wherein said filter catalyst includes a first filter catalyst having a first filter formed of a fibrous refractory inorganic compound, and a second filer catalyst having a second filter formed of a sintered body of refractory inorganic compound, the second filter catalyst being

disposed downstream of the first filter catalyst relative to flow of exhaust gas.

24. A flow-through monolithic catalyst for use in an exhaust gas purifying system, comprising:

a first section functioning to adsorb and oxidize a soluble organic fraction in exhaust gas;

a second section functioning to adsorb nitrogen oxides in exhaust gas in a condition in which a temperature of exhaust gas is not higher than 200 °C; and

a third section functioning to allow carbon particle in exhaust gas to pass through the monolithic catalyst.

25. A filter catalyst for use in an exhaust gas purifying system, comprising:

a first section functioning to trap the carbon particle in exhaust gas; and

a second section functioning to oxidize hydrocarbons, carbon monoxide and nitrogen monoxide in exhaust gas.

26. An exhaust gas purifying system comprising:

a flow-through monolithic catalyst disposed in an exhaust gas passageway through which exhaust gas flows, said monolithic catalyst including means for adsorbing and oxidizing a soluble organic fraction in exhaust gas, means for adsorbing nitrogen oxides in exhaust gas in a condition in which a temperature of exhaust gas is not higher than 200 °C, and means for allowing carbon particle in exhaust gas to pass through the monolithic catalyst; and

a filter catalyst disposed in the exhaust gas passageway downstream of said flow-through monolithic catalyst, said filter catalyst including means for trapping the carbon particle, and means for oxidizing hydrocarbons, carbon monoxide and nitrogen monoxide in exhaust gas.

27. A method of purifying exhaust gas flowing through an exhaust gas passageway, comprising:

a first process accomplished in a flow-through monolithic catalyst disposed in the exhaust gas passageway, including

adsorbing and oxidizing a soluble organic fraction in exhaust gas,

adsorbing nitrogen oxides in exhaust gas in a condition in which a temperature of exhaust gas is not higher than 200 °C,

allowing carbon particle in exhaust gas to pass through the monolithic catalyst; and

a second process accomplished in a filter catalyst disposed in the exhaust passageway downstream of the flow-through monolithic catalyst, including

trapping the carbon particle in exhaust gas, and

oxidizing hydrocarbons, carbon monoxide and nitrogen monoxide in exhaust gas.

28. A method as claimed in Claim 27, wherein the exhaust passageway is of an internal combustion engine, wherein said method further comprises changing an air/fuel ratio of exhaust gas at a location near an outlet of the internal combustion engine during operation of the engine.

29. A method as claimed in Claim 28, wherein the changing an air/fuel ratio including changing the air-fuel ratio at a value of not larger than about 14.

30. A method as claimed in Claim 28, further comprising regulating an intake air amount, a fuel injection timing, an EGR rate, a fuel injection amount and a fuel injection pressure in the engine so as to change the air/fuel ratio at a value smaller than 14.7; controlling a ratio of [hydrogen / all reducing components] in exhaust

gas at a value of not smaller than 0.7 which exhaust gas is before subjected to adsorbing nitrogen oxides; and controlling a temperature of exhaust gas at a value of not lower than 500 °C.

31. A method as claimed in Claim 30, wherein controlling the exhaust gas temperature is carried out at intervals of consumption of an amount of fuel in the engine during operation of the engine.